IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of:	§	Group Art Unit: 2142
	§	
Michael J. Duigou, et al.	§	Examiner: Blair, Douglas B
	§	
	§	Atty. Dkt. No.: 5181-72300
	§	P5096
Serial No. 09/656,588	§	
	§	
	§	
Filed: September 7, 2000	§	
	§	
For: Method and Apparatus	§	
for Proximity Discovery	§	
of Services	§	

RESPONSE TO NOTIFICATION OF NON-COMPLIANT APPEAL BRIEF

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir/Madam:

In response to the Notification of Non-Compliant Appeal Brief of January 8, 2007, enclosed is a replacement Summary of Claimed Subject Matter section for the previously submitted Appeal Brief.

V. SUMMARY OF CLAIMED SUBJECT MATTER

Independent claim 1 is directed toward a method for accessing a proximity service including a client device (e.g., FIG. 6-10 and 44, items 110 and 2150) forming a direct point-to-point communication link with a service device (e.g., FIG. 6-10 and 44, items 112 and 2170) and the client device directly requesting, over the direct point-to-point communication link, to the service device a document (e.g., FIG. 44, item 2178) that describes an interface to access a service provided by the service device. As described in Appellants' specification, such as at p. 13, lines 18 – 24 for example, services on some devices, such as proximity-based services, may transmit service advertisements or other interface documents upon request. (*See e.g.*, FIG. 6, 7, 44; p. 13, line 18 – p. 14, line 12; p. 119, line 25 – p. 120, line 6; 121, line 28 – p. 122, line 7).

For instance, a service may transmit a service advertisement (e.g., FIG. 9 and 44, items 132 and 2178) in response to a connection request or a proximity service discovery message from a client (*See e.g.*, FIG. 44, 45; p. 13, line 18 – p. 14, line 12; p. 119, 11 – 23; p. 122, line 21 – p. 123, line 2). The client may send a proximity service discovery message to the service device in some embodiments (*See e.g.*, p. 15, lines 2 – 10). In other embodiments, a connection request may serve as the request for the document (*See e.g.*, p. 13, lines 6 – 14; p. 14, lines 7 – 10; p. 119, lines 11-23).

The direct point-to-point communication link (e.g., FIG. 44, proximity link) may be accomplished using various communications technologies, according to various embodiments. For example, the client and server devices may communicate in an IrDA point-to-point communication environment in one embodiment. (*See e.g.*, FIG. 44; p. 120, lines 8 – 17; p. 123, line 28 – p. 122, line 7). In other embodiments, the point-to-point communication link may utilize other wireless or wired communication technologies. (*See e.g.*, p. 13, lines 20 – 24; p. 35, line 28 – p. 36, line 3; p. 119, line 27 – p. 120, line 6).

In some embodiments, a service discovery mechanism may allow clients to

discover services without using separate, widely available rendezvous points (*See e.g.*, p. 13, line 26 – p. 14, line 2). For example, a service device providing one or more services may support a proximity communication link and a client device may form a proximity communication link with the service device and directly request from the service device a document that describes an interface to access a service provided by the service device. (*See e.g.*, FIG. 44; p. 14, lines 4 – 12; p. 14, lines 24 – 30; p. 120, lines 8 - 17). For instance, a printer device with a printer service that is available on a proximity basis may transmit its service advertisement to provide an XML schema for connecting to an running the printing service on the printer device (*See e.g.*, p. 13, lines 8 – 16).

The method of claim 1 also includes the client device receiving, also over the direct point-to-point communication link, the document directly from the service device. For example, a service interface document may be provided in a response message from the service device (*See e.g.*, FIG. 44, 45, p. 14, lines 14 – 22, p. 119, lines 15 – 21).

The document may include information describing how to access the service and the client device uses the information from the document to access the service. For instance, in some embodiments, the document may include a service advertisement for the service that may include a schema, such as an XML schema for example, specifying an interface to at least a portion of the service provided by the service device. (*See e.g.*, Fig. 44 and 45; p. 14, lines 14 – 22; p. 119, lines 9 – 19; p. 122, lines 2- 7). Additionally, in some embodiments, the client may use a URI and/or protocol specified in the document, or specified in a service advertisement in the document, to send and receive messages to the service device. (*See e.g.*, p. 32, lines 6 – 18; p. 34, line 27 – p. 35, line 14; p. 36, lines 22 – p. 37, line 4; p. 38, line 25 – p. 39, lines 2; p. 45, line 27 – p. 46, line 8).

The method of claim 1 also includes the client device using the information from said document to access the service (*See e.g.*, Fig. 44 and 45; p. 14, lines 14 – 22; p. 119, lines 9 – 19; p. 122, lines 2- 7), where the using includes a client on the client device requesting a security credential (*See, e.g.*, FIG. 20, 22, 26a and 41, items 300, 330, 1000,

1002, 1004 and 2074; p. 80, lines 7-19; p. 89, lines 19-24; p. 95, lines 19-30; p. 96, lines 1-6; p. 97, line 24 – p. 99, line 7; p. 107, line 25 – p. 108, line 26) from an authentication service specified in the document (*See, e.g.*, FIG. 20, 22, 26a and 41, items 300, 330, 1000, 1002, 1004 and 2074; p. 33, line 28 – p. 34, line 16; p. 36, line 22 – p. 37, line 4; p. 38, line 17 – p. 39, line 2; p. 59, lines 16-25; p. 60, line 7 – p. 61, line 15; p. 66, line 16 – p. 67, line 3; p. 75, line 19 – p. 76, line 16; p. 90, line 27 – p. 92, line 2; p. 93, line 1 – p. 95, line 17; and p. 97, lines 1 – 23).

Independent claim 19 is directed toward a system including a service device and a client device. The service device is configured to support a direct point-to-point communication link and to provide a service. The client device is configured to form the direct point-to-point communication link with the service device and to directly request from the service device a document that describes an interface to access the service. As described above regarding claim 1, services on some devices may transmit service advertisements or other interface documents upon request (*See e.g.*, FIG. 6, 7, 44; p. 13, line 18 – p. 14, line 12; p. 119, line 25 – p. 120, line 6; 121, line 28 – p. 122, line 7). The client may send a proximity service discovery message to the service device in some embodiments (*See e.g.*, p. 15, lines 2 – 10). In other embodiments, a connection request may serve as the request for the document (*See e.g.*, p. 13, lines 6 – 14; p. 14, lines 7 – 10; p. 119, lines 11-23).

The service device may also be configured to provide the document directly to the client device over the direct point-to-point communication link. For instance, a service may transmit a service advertisement in response to a connection request or a proximity service discovery message from a client (*See e.g.*, FIG. 44, 45; p. 13, line 18 – p. 14, line 12; p. 119, 11 – 23; p. 122, line 21 – p. 123, line 2).

The client device is also configured to use the information from the document to access the service. For example, the document may include a service advertisement for the service that may include a schema, such as an XML schema for example, specifying an interface to at least a portion of the service provided by the service device. (*See e.g.*,

Fig. 44 and 45; p. 14, lines 14 – 22; p. 119, lines 9 – 19; p. 122, lines 2- 7). Additionally, in some embodiments, the client may use a URI and/or protocol specified in the document, or specified in a service advertisement in the document, to send and receive messages to the service device. (*See e.g.*, p. 32, lines 6 – 18; p. 34, line 27 – p. 35, line 14; p. 36, lines 22 – p. 37, line 4; p. 38, line 25 – p. 39, lines 2; p. 45, line 27 – p. 46, line 8).

The client device is also configured to support a transport connection (*See, e.g.*, FIG. 24, 27 and 29, items 1412,m 1202, 1252; p. 15, lines 12-18; p. 123, lines 4-16; p. 124, lines 4 – 26) in addition to the direct point-to-point communication link and to make the document available to other devices over the transport connection and provide a bridge (*See, e.g.*, FIG. 24, 27 and 29, items 1412, 1202, 1252; p. 62, lines 8-15; p. 124, lines 20-26; and esp. p. 127, line 1 – p. 133, line 7) from the transport connection to the direct point-to-point communication link so that the other devices may access the service.

Independent claim 37 is directed toward a client device including a port, such as proximity port 2156 for example, and an interface, such as client interface 2154 for example. (*See, e.g.,* FIG 44, 45, p. 121, line 28 – p. 122, line 7; p. 122, line 21 – p. 123, line 2). The port may be configured to form a direct point-to-point communication link, such as an IrDA link in one embodiment, with a service device and the interface may be configured to directly request over the point-to-point communication link a document that describes an interface to access a service. (*See, e.g.,* FIG 44, 45, p. 121, line 28 – p. 122, line 8; p. 122, line 21 – p. 123, line 2).

For instance, a service may transmit a service advertisement in response to a connection request or a proximity service discovery message from a client (*See e.g.*, FIG. 44, 45; p. 13, line 18 – p. 14, line 12; p. 119, 11 – 23; p. 122, line 21 – p. 123, line 2). The interface may be configured to receive the document directly from the service over the point-to-point communication link and to use the information from the document to access the service. (See, e.g. FIG. 24, 44, 45; p. 122, lines 5 – 8; p. 122, line 21 – p. 123, line 2). For example, the document may include a service advertisement for the service

that may include a schema, such as an XML schema for example, specifying an interface to at least a portion of the service provided by the service device. (*See e.g.*, Fig. 44 and 45; p. 14, lines 14 – 22; p. 119, lines 9 – 19; p. 122, lines 2 - 7). Additionally, in some embodiments, the client may use a URI and/or protocol specified in the document, or specified in a service advertisement in the document, to send and receive messages to the service device. (*See e.g.*, p. 32, lines 6 – 18; p. 34, line 27 – p. 35, line 14; p. 36, lines 22 – p. 37, line 4; p. 38, line 25 – p. 39, lines 2; p. 45, line 27 – p. 46, line 8).

Claim 37 also recites that using the information from the document to access the service includes a client on the client device requesting a security credential (*See, e.g.*, FIG. 20, 22, 26a and 41, items 300, 330, 1000, 1002, 1004 and 2074; p. 80, lines 7-19; p. 89, lines 19-24; p. 95, lines 19-30; p. 96, lines 1-6; p. 97, line 24 – p. 99, line 7; p. 107, line 25 – p. 108, line 26) from an authentication service specified in the document (*See, e.g.*, FIG. 20, 22, 26a and 41, items 300, 330, 1000, 1002, 1004 and 2074; p. 33, line 28 – p. 34, line 16; p. 36, line 22 – p. 37, line 4; p. 38, line 17 – p. 39, line 2; p. 59, lines 16-25; p. 60, line 7 – p. 61, line 15; p. 66, line 16 – p. 67, line 3; p. 75, line 19 – p. 76, line 16; p. 90, line 27 – p. 92, line 2; p. 93, line 1 – p. 95, line 17; and p. 97, lines 1 – 23).

Independent claim 38 is directed toward a service device including a port, such as proximity port 2172 for example, an interface, such as service interface 2174 for example, and a service unit, such as service 2176 for example. The port may be configured to form a direct point-to-point communication link with a client device. The direct point-to-point communication link may be accomplished using various communications technologies, according to various embodiments. For example, the client and server devices may communicate in an IrDA point-to-point communication environment in one embodiment. (*See e.g.*, FIG. 44; p. 120, lines 8 – 17; p. 123, line 28 – p. 122, line 7). In other embodiments, the point-to-point communication link may utilize other wireless or wired communication technologies. (*See e.g.*, p. 13, lines 20 – 24; p. 35, line 28 – p. 36, line 3; p. 119, line 27 – p. 120, line 6).

The interface may be configured to receive over the point-to-point communication

link a request from a client for a document that describes an interface to access the service. For instance, a service may transmit a service advertisement in response to a connection request or a proximity service discovery message from a client (*See e.g.*, FIG. 44, 45; p. 13, line 18 – p. 14, line 12; p. 119, 11 – 23; p. 122, line 21 – p. 123, line 2). The client may send a proximity service discovery message to the service device in some embodiments (*See e.g.*, p. 15, lines 2 – 10). In other embodiments, a connection request may serve as the request for the document (*See e.g.*, p. 13, lines 6 – 14; p. 14, lines 7 – 10; p. 119, lines 11-23).

The interface may also be configured to provide the document directly from the client over the point-to-point communication link. For instance, a printer device with a printer service that is available on a proximity basis may transmit its service advertisement to provide an XML schema for connecting to an running the printing service on the printer device (*See e.g.*, FIG. 4; p. 13, lines 8 – 16; p. 14, lines 4 – 12; p. 14, lines 24 – 30; p. 120, lines 8 - 17).

The service device of claim 38 also includes an authentication service (*See, e.g.*, FIG. 20, 22, 26a and 41, items 300, 330, 1000, 1002, 1004 and 2074; p. 33, line 28 – p. 34, line 16; p. 36, line 22 – p. 37, line 4; p. 38, line 17 – p. 39, line 2; p. 59, lines 16-25; p. 60, line 7 – p. 61, line 15; p. 66, line 16 – p. 67, line 3; p. 75, line 19 – p. 76, line 16; p. 90, line 27 – p. 92, line 2; p. 93, line 1 – p. 95, line 17; and p. 97, lines 1 – 23) configured to receive a request from the client for a security credential (*See, e.g.*, FIG. 20, 22, 26a and 41, items 300, 330, 1000, 1002, 1004 and 2074; p. 80, lines 7-19; p. 89, lines 19-24; p. 95, lines 19-30; p. 96, lines 1-6; p. 97, line 24 – p. 99, line 7; p. 107, line 25 – p. 108, line 26).

The service unit may be configured to be accessed by the client according to information specified in the document. For instance, in some embodiments, the document may include a service advertisement for the service that may include a schema, such as an XML schema for example, specifying an interface to at least a portion of the service provided by the service device. (*See e.g.*, Fig. 44 and 45; p. 14, lines 14 – 22; p.

119, lines 9 – 19; p. 122, lines 2- 7). Additionally, in some embodiments, the client may use a URI and/or protocol specified in the document, or specified in a service advertisement in the document, to send and receive messages to the service device. (*See e.g.*, p. 32, lines 6 – 18; p. 34, line 27 – p. 35, line 14; p. 36, lines 22 – p. 37, line 4; p. 38, line 25 – p. 39, lines 2; p. 45, line 27 – p. 46, line 8).

Independent claim 39 is directed toward a tangible, computer-accessible storage medium including program instructions that are computer-executable on a client device. The program instructions are computer-executable to implement forming a direct point-to-point communication link with a service device and directly requesting, over the direct point-to-point communication link, to the service device a document that describes an interface to access a service provided by the service device. (*See, e.g.,* p. 160, lines 19 – 28; p. 166, line 30 – p. 167, line 5). For instance, a service may transmit a service advertisement in response to a connection request or a proximity service discovery message from a client (*See e.g.*, FIG. 44, 45; p. 13, line 18 – p. 14, line 12; p. 119, 11 – 23; p. 122, line 21 – p. 123, line 2). The client may send a proximity service discovery message to the service device in some embodiments (*See e.g.*, p. 15, lines 2 – 10). In other embodiments, a connection request may serve as the request for the document (*See e.g.*, p. 13, lines 6 – 14; p. 14, lines 7 – 10; p. 119, lines 11-23).

The program instructions are also executable to implement receiving, over the direct point-to-point communication link, the document, which includes information describing how to access the service, directly from the service device and using the information from the document to access the service. The direct point-to-point communication link may be accomplished using various communications technologies, according to various embodiments. For example, the client and server devices may communicate in an IrDA point-to-point communication environment in one embodiment. (*See e.g.*, FIG. 44; p. 120, lines 8 – 17; p. 123, line 28 – p. 122, line 7). In other embodiments, the point-to-point communication link may utilize other wireless or wired communication technologies. (*See e.g.*, p. 13, lines 20 – 24; p. 35, line 28 – p. 36, line 3; p. 119, line 27 – p. 120, line 6). A service interface document may be provided in a

response message from the service device for example (*See e.g.*, FIG. 44, 45, p. 14, lines 14 – 22, p. 119, lines 15 – 21).

The document may include information describing how to access the service and the client device uses the information from the document to access the service. For instance, in some embodiments, the document may include a service advertisement for the service that may include a schema, such as an XML schema for example, specifying an interface to at least a portion of the service provided by the service device. (*See e.g.*, Fig. 44 and 45; p. 14, lines 14 – 22; p. 119, lines 9 – 19; p. 122, lines 2- 7). Additionally, in some embodiments, the client may use a URI and/or protocol specified in the document, or specified in a service advertisement in the document, to send and receive messages to the service device. (*See e.g.*, p. 32, lines 6 – 18; p. 34, line 27 – p. 35, line 14; p. 36, lines 22 – p. 37, line 4; p. 38, line 25 – p. 39, lines 2; p. 45, line 27 – p. 46, line 8).

Claim 39 also recites that the client device is configured to support a transport connection (*See, e.g.*, FIG. 24, 27 and 29, items 1412,m 1202, 1252; p. 15, lines 12-18; p. 123, lines 4-16; p. 124, lines 4 – 26) in addition to the direct point-to-point communication link, where the client device is configured to make the document available to other devices over the transport connection and provide a bridge (*See, e.g.*, FIG. 24, 27 and 29, items 1412,m 1202, 1252; p. 62, lines 8-15; p. 124, lines 20-26; and esp. p. 127, line 1 – p. 133, line 7) from the transport connection to the direct point-to-point communication link so that other devices may access the service.

The summary above describes various examples and embodiments of the claimed subject matter; however, the claims are not necessarily limited to any of these examples and embodiments. The claims should be interpreted based on the wording of the respective claims.

CONCLUSION

Appellants assert that the above Summary of Claimed Subject Matter section is in complete compliance with all applicable rules and regulations. Consideration of Appellants' Appeal Brief is respectfully requested.

Should any fees be due, the Commissioner is authorized to charge said fees to Meyertons, Hood, Kivlin, Kowert, & Goetzel, P.C. Deposit Account No. 501505/5181-72300/RCK.

Respectfully submitted,

/Robert C. Kowert/
Robert C. Kowert, Reg. No. 39,255
Attorney for Appellants

Meyertons, Hood, Kivlin, Kowert & Goetzel, P.C.
P.O. Box 398
Austin, TX 78767-0398
(512) 853-8850

Date: February 8, 2008